

C L A I M S

What is claimed is:

1. A first device to synchronize data with a second device, the first device comprising:
 - a. one or more applications;
 - b. a network layer coupled to interface with the second device;
 - c. a synchronization layer coupled to the network layer to provide a synchronization protocol between the first device and the second device; and
 - d. an interface layer coupled to communicate with the one or more applications and the synchronization layer to provide generic synchronization communications between the one or more applications and the synchronization layer.
2. The first device of claim 1 wherein at least one of the one or more applications comprises a synchronization application.
3. The first device of claim 2 wherein the synchronization application is selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload.
4. The first device of claim 1 wherein the interface layer is an application programming interface (API).
5. The first device of claim 1 wherein the interface layer is protocol independent.
6. The first device of claim 1 wherein synchronization layer comprises a synchronization protocol stack.
7. The first device of claim 5 wherein the synchronization protocol stack is selected from a group consisting of SyncML, Information Content Exchange (ICE), and Web Distributed Authoring and Versioning (WebDAV).

8. A network comprising:
 - a. one or more network devices; and
 - b. an application device comprising:
 - i. one or more applications;
 - ii. a network layer coupled to interface with the one or more network devices;
 - iii. a synchronization layer coupled to the network layer to provide a synchronization protocol between the application device and the one or more network devices; and
 - iii. an interface layer coupled to communicate with the one or more applications and the synchronization layer to provide generic synchronization communications between the one or more applications and the synchronization layer.
9. The network of claim 8 wherein at least one of the one or more applications comprises a synchronization application.
10. The network of claim 9 wherein the synchronization application is selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload.
11. The network of claim 8 wherein the interface layer is an application programming interface (API).
12. The network of claim 8 wherein the interface layer is protocol independent.
13. The network of claim 8 wherein synchronization layer comprises a synchronization protocol stack.
14. The network of claim 13 wherein the synchronization protocol stack is selected from a group consisting of SyncML, Information Content Exchange (ICE), and Web Distributed Authoring and Versioning (WebDAV).

15. A method of providing an interface to one or more synchronization applications resident within a first device coupled to a network of devices, the method comprising:
 - a. sending and receiving messages to and from the one or more synchronization applications through an interface layer to one or more synchronization protocol stacks, to synchronize data between the first device and at least one other device within the network of devices, wherein the messages between the one or more synchronization applications and the interface layer are independent of a protocol used between the interface layer and the synchronization protocol stacks; and
 - b. generating and receiving communications at the interface layer to complete data synchronization between the first device and the at least one other device within the network of device.
16. The method of claim 15 wherein the one or more synchronization applications are selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload.
17. The method of claim 15 wherein the interface layer is an application programming interface (API).
18. The method of claim 15 wherein the interface layer is protocol independent.
19. The method of claim 15 wherein the one or more synchronization protocol stacks are selected from a group consisting of SyncML, Information Content Exchange (ICE), and Web Distributed Authoring and Versioning (WebDAV).
20. The method of claim 15 wherein communications generated at the interface layer are sent to a network layer via the one or more synchronization protocol stacks within the first device, and communications received at the interface layer are received from the one or more synchronization protocol stacks via the network layer.

21. An apparatus for providing an interface to one or more synchronization applications resident within a first device coupled to a network of devices, the apparatus comprising:
 - a. means for sending and receiving messages to and from the one or more synchronization applications through an interface layer to one or more synchronization protocol stacks, to synchronize data between the first device and at least one other device within the network of devices, wherein the messages between the one or more synchronization applications and the interface layer are independent of a protocol used between the interface layer and the synchronization protocol stacks; and
 - b. means for generating and receiving communications at the interface layer to complete data synchronization between the first device and the at least one other device within the network of device.
22. The apparatus of claim 21 wherein the synchronization application is selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload.
23. The apparatus of claim 21 wherein the interface layer is an application programming interface (API).
24. The apparatus of claim 21 wherein the interface layer is protocol independent.
25. The apparatus of claim 21 wherein the synchronization protocol stack is selected from a group consisting of SyncML, Information Content Exchange (ICE), and Web Distributed Authoring and Versioning (WebDAV).